

Amendment to the Claims

Please amend claim 1 as follows.

1       1. (currently amended) A zoom lens formed of only two lens groups, in order from the object  
2 side, as follows:

3              a first lens group; and

4              a second lens group;

5 wherein

6              the first lens group includes, in order from the object side: a first lens component of  
7 negative refractive power that is made of plastic and has at least one aspheric lens surface; and a  
8 second lens component of positive refractive power;

9              the second lens group includes, in order from the object side: a stop; a first lens  
10 component consisting of a first lens element having a biconvex shape and made of plastic with at  
11 least one lens surface aspheric; and a second lens component that includes, in order from the  
12 object side, a lens element having negative refractive power with the absolute value of the curvature of the  
13 curvature of its object-side lens surface being smaller than the absolute value of the curvature of  
14 its image-side lens surface, said lens element being joined at said image-side lens surface to a  
15 lens element having a biconvex shape; and

16              the following conditions are satisfied:

17               $B^{1/2} < f_{G2} / f_w < 0.9 \cdot B$

18               $-2.0 < f_{G1-1} / f_w < -1.5$

19               $R_{G2-1} / f_w > 0.8$

20               $| f_{G1} / f_w | < 3 \cdot B$

21 where

22              B is the zoom ratio of the zoom lens, namely, the ratio of the focal length at the telephoto  
23 end divided by the focal length at the wide-angle end,

24               $f_{G2}$  is the focal length of the second lens group,

25               $f_w$  is the focal length of the zoom lens at the wide-angle end,

26        $f_{G1-1}$  is the focal length of the first lens component of the first lens group,  
27        $R_{G2-1}$  is the radius of curvature of the object-side lens surface of the first lens element of  
28       the second lens group, and  
29        $f_{G1}$  is the focal length of the first lens group.

- 1       2. (original) The zoom lens of claim 1, wherein the first lens group consists of the first lens  
2       component of the first lens group and the second lens component of the first lens group.
  
- 1       3. (original) The zoom lens of claim 1, wherein each of the first lens component of the first lens  
2       group and the second lens component of the first lens group consists of a lens element.
  
- 1       4. (original) The zoom lens of claim 2, wherein each of the first lens component of the first lens  
2       group and the second lens component of the first lens group consists of a lens element.
  
- 1       5. (original) The zoom lens of claim 1, wherein the second lens group consists of three lens  
2       elements.
  
- 1       6. (original) The zoom lens of claim 5, wherein the first lens group consists of the first lens  
2       component of the first lens group and the second lens component of the first lens group.
  
- 1       7. (original) The zoom lens of claim 5, wherein each of the first lens component of the first lens  
2       group and the second lens component of the first lens group consists of a lens element.
  
- 1       8. (original) The zoom lens of claim 6, wherein each of the first lens component of the first lens  
2       group and the second lens component of the first lens group consists of a lens element.
  
- 1       9. (original) A zoom lens formed of only two lens groups, arranged along an optical axis in order

2 from the object side as follows:

3 a first lens group; and

4 a second lens group;

5 wherein

6 the first lens group includes, arranged along the optical axis in order from the object side,  
7 a first lens component made of plastic, having negative refractive power, and having at least one  
8 aspheric lens surface, and a second lens component having positive refractive power;

9 the second lens group includes, in order from the object side: a stop; a first lens  
10 component consisting of a first lens element with a biconvex shape that is made of plastic and  
11 has at least one aspheric lens surface; and a second lens component that includes, in order from  
12 the object side, a lens element of negative refractive power with the absolute value of the  
13 curvature of its object-side lens surface being smaller than the absolute value of the curvature of  
14 its image-side lens surface, said lens element being joined at said image-side lens surface to a  
15 lens element having a biconvex shape;

16 focusing is performed by movement of the second lens group along the optical axis; and  
17 the following conditions are satisfied:

18  $B^{1/2} < f_{G2} / f_w < 0.9 \cdot B$

19  $-2.0 < f_{G1-1} / f_w < -1.5$

20  $R_{G2-1} / f_w > 0.8$

21  $| f_w / R_1 | < 0.08$

22  $10 < | f_{G2-2,3} / f_w | < 100$

23 where

24 B is the zoom ratio of the zoom lens, namely, the ratio of the focal length at the telephoto  
25 end divided by the focal length at the wide-angle end,

26  $f_{G2}$  is the focal length of the second lens group,

27  $f_w$  is the focal length of the zoom lens at the wide-angle end,

28  $f_{G1-1}$  is the focal length of the first lens component of the first lens group,

29  $R_{G2-1}$  is the radius of curvature of the object-side lens surface of the first lens element of  
30 the second lens group,

31            $R_1$  is the radius of curvature of the object-side lens surface of the first lens component of  
32           the first lens group, and  
33            $f_{G2-3}$  is the composite focal length of the joined lens elements of the second lens group.

1       10. (original) The zoom lens of claim 9, wherein the first lens group consists of the first lens  
2           component of the first lens group and the second lens component of the first lens group.

1       11. (original) The zoom lens of claim 9, wherein each of the first lens component of the first lens  
2           group and the second lens component of the first lens group consists of a lens element.

1       12. (original) The zoom lens of claim 10, wherein each of the first lens component of the first  
2           lens group and the second lens component of the first lens group consists of a lens element.

1       13. (original) The zoom lens of claim 9, wherein the second lens group consists of three lens  
2           elements.

1       14. (original) The zoom lens of claim 13, wherein the first lens group consists of the first lens  
2           component of the first lens group and the second lens component of the first lens group.

1       15. (original) The zoom lens of claim 13, wherein each of the first lens component of the first  
2           lens group and the second lens component of the first lens group consists of a lens element.

1       16. (original) The zoom lens of claim 14, wherein each of the first lens component of the first  
2           lens group and the second lens component of the first lens group consists of a lens element.

1       17. (original) The zoom lens of claim 1, wherein at least three lens surfaces of the zoom lens are  
2           aspheric lens surfaces.

1       18. (original) The zoom lens of claim 9, wherein at least three lens surfaces of the zoom lens are  
2       aspheric lens surfaces.

1       19. (original) The zoom lens of claim 1, wherein the following condition is satisfied:

2               $| f_w / R_1 | < 0.025$

3       where

4               $R_1$  is the radius of curvature of the object-side lens surface of the first lens element of the  
5       first lens component of the first lens group.

1       20. (original) The zoom lens of claim 9, wherein the following condition is satisfied:

2               $| f_w / R_1 | < 0.025.$